

Appl. No. 09/863,932  
Amdt. Dated 05/04/2005  
Reply to Office Action of 01/04/2005

**Amendments to the Claim of Priority:**

Please replace the paragraph [0001] with the following amended paragraph:

[0001] This application claims the benefit of U.S. Provisional Application No. 60/239,317.

**Amendments to the Specification:**

Please add the following new paragraph before paragraph [0021]:

[0021] The MAC address 315 of a set-top box can be used as a unique identifier. This unique identifier can be used as a seed for key generation or as the host identifier. The key generation process can use a number of different generation keys. According to one embodiment of the invention, as shown in Figure 3, six (6) generation keys are utilized as represented by Generation Key #1 - #6. It is expected that Generation Keys #1 - #6 would all be unique values and would be kept secret from the user of the set-top box. For this embodiment, Generation Key #1 320, Generation Key #2 325, and Generation Key #3 330 are used to create a STB Key #1 305. Similarly Generation Key #4, Generation Key #5, and Generation Key #6 are used to create a STB Key #2 310. The use of Exclusive ORs (EXORs 350, 360, 335 and 345) is one technique to permute data. The use of simple EXORs still requires a hacker to search for the values of the entire key space for Generation Key #1 320, Generation Key #2 325 and Generation Key #3 330 at the same time. Using a key generation process as shown in Figure 3, an operator would not need to keep a database of STB Key #1 305 and STB Key #2 310 values for each set-top box. Rather, these key values can be re-generated on-the-fly upon receipt of the MAC address 315 during communications.

Please supplement paragraph [0022], formerly paragraph [0021], with the following:

[0022] Figure 4 illustrates one embodiment of the method of the present invention. At block 405, the device identification is accessed. As noted earlier, the device identification may be a distinctive device identification, such as the MAC address delivered as part of the header source address information of an IP message. At block 410, data is encoded using a key generated using the device ID. At block 415, the encoded data is transmitted in a message to a receiving device, the message including the device ID, for example, in its header. Using the device ID from the header, the receiving device accesses the key, block 420. As noted earlier, the receiving device may generate the key using the device ID, or may access, for example, from non-volatile memory, the key corresponding to the device ID. At block 425 the receiving device decodes the encoded data of the message using the key.